



Montana Department of
ENVIRONMENTAL QUALITY

1225839 - R8 SDMS

Brian Schweitzer, Governor

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December 17, 2010

Libby Area Technical Advisory Group
c/o Mike Noble, Chair
6797 Farm to Market Road
Libby MT 59923
(hard copy sent via US Mail in addition to electronic copy)

Re: LATAG Comments on Draft Final Remedial Investigation Report for Operable Unit 7 (OU7) of the Libby Asbestos Superfund Site (Tetra Tech EMI, October 29, 2010)

Dear Mr. Noble,

Thank you for Dr. Spear's comments of December 4, 2010, on the above referenced document. Following please find the Montana Department of Environmental Quality's (DEQ) response to the questions raised in Dr. Spear's letter. Please note Dr. Spear's letter has been abridged and only the questions or direct comments have been included below, identified by bold text. A complete copy of Dr. Spear's letter is included by reference.

Page 3-5 Soils: In my Opinion, removal action levels for soil samples from specific use areas should [by] analyzed by TEM because of the obvious exposure pathways.

DEQ response: For the Libby project, a modified version of PLM is being used for bulk soil analysis, commonly referred to as PLM-VE (visual estimation). The PLM-VE method is appropriate for use to identify properties meeting the current removal criteria. Additional preparation and analytical methods are being evaluated for use at the Libby project for future remedial needs, including fluidized bed method to prepare soil samples for TEM analysis.

Page 3-1: The first sentence in the last paragraph is somewhat misleading.

DEQ response: The sentence is intended to be general, includes the word "typically," and utilizes information from a different source than what was provided in the LATAG comments. Neither source is misleading nor more correct than the other, just used in different context.

Page 4-1: Have the homes requiring this type of response been correlated with the presence of visible vermiculite and dust sampling results in the living spaces of these homes? Also, will these homes be inspected in the future to assess the adequacy of remediation measures; i.e., taping over openings?

DEQ Response (corrected as Page 4-6): In OU7, there were 15 buildings requiring some level of temporary barriers. All of those also had visible vermiculite in the living space as noted by the field inspection teams. None of those buildings had dust results above 5,000 s/cm². Removal actions have been completed at 14 of the 15 buildings requiring temporary barriers. The remaining one is in the removal process, working toward removal actions next year. Given the completion of the removal actions at these buildings, it is not necessary to inspect these locations in the future for the adequacy of the temporary barrier measures.

Page 4-6 Visible Inspection: Were records kept regarding the storage of material (i.e., Christmas ornaments) in attics containing vermiculite insulation? If removal of vermiculite insulation from an attic is required, how is the issue of stored attic material handled?

DEQ Response: Field teams noted the presence of storage in attic spaces in the log books, occasionally wiped and removed items at the request of homeowners, and described to the homeowner how to access the items left in the attic space to lessen the potential for exposure. Items stored in attics with vermiculite-containing insulation were either wiped/washed during the removal activities and returned to the attic post clearance sampling or disposed of per the property owners consent.

Pages 4-6 and 4-7 Dust Sampling: What is the breakdown of microvac samples in each home by type of surface sampled; i.e., porous vs. non-porous surface? Was an analysis performed to determine the collection efficiency of microvac sampling by type of surface? Is the dust sampling methodology (microvac) used in Troy and OU4 to identify concentrations of Libby Amphibole in the living spaces of homes the best method to protect public health?

Page 4-7: What criteria was used to establish "where contaminated dust was most likely to be found?"

Page 4-7: I am concerned that the ASTM method was not followed in the microvac sampling methods in Troy (or OU4)? Does a 30 second sample from a 100 cm² template equate to a 2 minute sample until there is no visible dust or particulate matter remaining. Was an analysis performed to determine the effect of the modified method?

Page 4-15, Table 4-1, TFO 00012: Cease the collection of dust samples as part of TAPE inspection.

SOP for dust sampling: Were attempts made to collect dust samples from locations near attic accesses; i.e., closet accesses or underneath ceiling attic accesses?

DEQ response: The dust sampling protocol and procedure was continually modified and evaluated through the summer of 2008, ultimately concluding in termination of the collection of dust samples. Dust sample collection was terminated in OU4 in 2007.

The dust sampling locations were selected based on team observations of accessible (e.g., entry-way rug, hall under attic access), infrequent (e.g., high shelves, ceiling fan blades) and inaccessible (e.g., behind oven, refrigerator or dryer). On July 12, 2007, the field teams were provided a new interior dust prioritization summary dated July 11, 2007. The list breaks down porous accessible, non-porous accessible, infrequent and inaccessible categories. The team was directed to prioritize the porous accessible flooring surfaces at all entrances to the buildings.

The microvac method is no longer being used to collect dust samples. I direct the LATAG to documents associated with OU4 for further discussion of this issue. Of particular interest might be the Dust Composite Sampling Pilot Study of May 2007. These documents are beyond the scope of the OU7 RI Report.

The field teams were instructed to collect dust samples where contaminated dust was most likely to be found, for example entry rugs, high horizontal surfaces (bookshelves, fan blades), and near or under areas where vermiculite-containing attic insulation was leaking into living spaces or attic access points.

Upon review of the available dust analytical results between 2007 and 2008, in comparison to the other removal "triggers" identified for the site, DEQ concluded the dust analytical results do not contribute meaningful information to the removal decisions and requested permission from

EPA to cease the collection of dust samples. Specifically, in OU7, DEQ identified 78 buildings (or parts of buildings) in which the field inspection teams noted visible vermiculite in interior living spaces (excluding attics). Not one of the associated dust samples were above the current trigger level of 5,000 s/cm². Conversely, there are 6 dust samples above the current trigger level with no interior visible vermiculite noted during the field inspection. Therefore, DEQ concluded and EPA concurred, the lack of information provided by a dust analytical result does not justify the expense of the collection.

Page 4-29 4.6.3 (1): what is meant by the phrase "uncontained vermiculite insulation"?

DEQ response: "Uncontained vermiculite insulation" refers to insulation that is loose and migrating. It does not include insulation behind walls or otherwise enclosed.

Page 6-2 Residential Removal Actions: Was any additional sampling (air, surface) performed during and after the residential removal actions?

DEQ response: Air samples are collected outside the removal area and from workers inside the work zone during removal activities. Aggressive clearance sampling is performed after interior removal activities are complete. Aggressive sampling involves leaf blowers and stationary samplers.

Page 7-4, second full paragraph: LA fibers are not visible and could certainly be present without the presence of visible vermiculite.

DEQ response: The discussion on Page 7-4 was specific to a series of decisions made in August of 2007. TFO-00005 reduced the number of dust samples and allowed investigators to compare dust analytical results to visual (dust trigger) or anecdotal (interview response) evidence. However, it was later decided that dust sampling should occur in all buildings to determine if a removal action was necessary. TFO-00006 was prepared on August 23, 2007 to terminate TFO-00005 and require that dust sampling occur in all buildings.

Page 7-6 Environmental Resource Specialist Activities: Was the isolation measure of covering openings between attics and living areas with plastic sheeting considered a permanent isolation of the exposure pathway?

DEQ response: Section 7.1.1.5 of the RI Report states: "The objective of the ERS actions was to temporarily isolate potential LA-containing material from residents or workers until removal activities could be conducted." (emphasis added) The isolation measure of covering openings with plastic sheeting was not considered permanent and the importance of not disturbing the barrier in the interim was discussed with property owner.

In a related question, is activity based sampling (ABS) planned for Troy?

DEQ response: At this time, ABS is not planned for OU7. However, the potential for ABS in OU7 is a point of discussion on the agenda for an upcoming planning meeting with the Libby team (EPA and DEQ project managers).

Page 7-15: If a home is listed for a removal action based on the action level of 5,000 s/cm², are carpets removed as part of the remedy?

DEQ response: Carpet is not routinely removed as part of removal activities.

Thank you for your continued interest in the Libby Asbestos Superfund Site. The draft final RI Report is forthcoming. Please feel free to contact me with any further questions or concerns regarding this report or other issues related to the project. I can be reached at 1-800-246-8198 (toll free in Montana), (406) 841-5040, or electronically at clecours@mt.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Catherine LeCours", written in a cursive style.

Catherine LeCours
Federal Superfund Project Manager
Montana Department of Environmental Quality

c: EPA Denver, site file
DEQ Helena, site file